

**UNIVERSITY OF EDUCATION, WINNEBA-KUMASI
COLLEGE OF TECHNOLOGY EDUCATION-KUMASI
DEPARTMENT OF TECHNOLOGY EDUCATION**

COURSE OUTLINE

COURSE TITLE: BLACKSMITH AND FABRICATION
COURSE CODE: BTE 316
CREDITS: 3 Hours
SEMESTER: 1
LECTURER: STEPHEN K. AMOAKOHENE

COURSE DESCRIPTION

The course is designed to enable students acquire practical skills in blacksmithing and fabrication. The course is a practical one and must be taught and learnt through series of practical activities.

AREAS OF COVERAGE

BLACKSMITHING

BLACKSMITHING TOOLS AND EQUIPMENT

The hearth, anvil, tongs, chisel, punches and drifts, hammers (i.e. sledge, straight pain smiths hammers) swage, fullers, flatter, swage block, forge fire tools, (i.e. rake, poker, shovel).

BLACKSMITHING PROCESSES

Drawing down, flattering, punching and drifting, fullering, swaging, upsetting, twisting, bending,

SHEET METAL WORK

Sheet Metal Work Tools And Equipment

Hand shears, stakes, (i.e. hatchet, titman, funnel, extinguisher, round-bottom, Bick iron, creasing iron, half moon, horse, hammers (i.e. creasing and panning), mallets (i.e. bossing and titman's mallet groove, punch, folding bars (i.e. plain and angle iron types).

Sheet metalwork Processes

Beading, wiring joints-lap, countersunk, countersunk lap modified lap paned down knocked up grooved seam.

SOFT SOLDERING

Soldering tools, equipment and material soldering bench, soldering bit, Soldering stoves, fluxes (passive and active) solders
Soldering techniques.

RIVETING

Riveting tools, materials (e.g. rivet-snap, pan countersunk), techniques and common faults in riveting.

ASSESSMENT

Continuous Assessment (i.e. quizzes, assignments class exercise/activities) 40%

End of Semester Examination – A two –hour paper based on topics covered 60%

REFERENCES

Sackey JKN and S.K. Amoakohene (1996) motivate series: Metal work
Technology Macmillan Education Ltd London